

7-31-02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RECEIVED

AUG 0 5 20d2



Applicant(s):

James A. Moorer

Sonic Solutions, Inc.

Title:

Assignee:

Ultra-Directional Microphones

Application No.:

09/919,742

M-11445 US

Filing Date:

Technology Center 2600 July 31, 2001

Examiner:

Docket No.:

2644 Group Art Unit:

San Franci July 29,

COMMISSIONER FOR PATENTS Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT **UNDER 37 CFR § 1.97(b)**

Dear Sir:

Pursuant to 37 C.F.R. § 1.56, § 1.97 and § 1.98, the documents listed on the accompanying form PTO-1449 are called to the attention of the Examiner for the above patent application. Copies of these documents are enclosed.

Citation of these documents shall not be construed as:

- an admission that the documents are necessarily prior art with respect to the instant invention;
 - 2. a representation that a search has been made, other than as described above; or
- an admission that the information cited herein is, or is considered to be, material to patentability as defined in § 1.56(b).

EXPRESS MAIL LABEL NO:

Respectfully submitted,

EV029354340US

Reg. No. 46,030

AW OFFICES OF

JERVEN MORRILL MacPHERSON LLP METRO DRIVE SUITE 700 AN JOSE, CA 95110 (408) 453-9200 FAX (408) 453-7979

854019 v1

Application No. 09/919,742

-1-

J.S. Departme		mmerce, Patent and	Trademark Offic	e	Atty Dock	et No.	Serial No	
						US	09/919,74	12
INFORMATION DISCLOSURE STATEMENT BY APPLOANT Applicant						(s) .		THE
(Use several sheets if necessary) Moores						Moorer, James A.		
					Filing Date		Group Technolo 2644	
				A. CHE	July 31, 20	001	2644	"JOIOG
			U.S. F	atent Balling				
Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing I	
	AA	4,703,506	10/27/1987	Sakamoto et al.			J. J. P.	
	AB	4,802,227	1/31/1989	Elko et al.			Dr.	_
	AC	4,922,536	5/1/1990	Hoque			AUG Technolo	CETV
···	AD	5,051,799	9/24/1991	Paul et al.			AUG	0 5 2
	AE	5,058,170	10/15/1991	Kanamori et al.			Technology	• • • • •
	AF	5,483,599	1/9/1996	Zagorski			Technology	Center
	AG	5,737,430	4/7/1998	Widrow				, , , ,
	AH	5,940,118	. 8/17/1999	Van Schyndel				
	AI		n					
	AJ							
	AK							
			Foreign	Patent Documents				
							Tran	slation
		Document	Date	Country	Class	Subclass	Yes	No
	AL	WO 00/52959	9/8/2000	WIPO				
	AM	WO 99/53336	10/21/1999	WIPO				
	AN	WO 99/27754	6/3/1999	WIPO				
	AO	2 097 121 A	4/21/1981	Great Britain			:	
	AP	2 104 218 A	7/28/1981	Great Britain				
		OTHER A	ART (Including A	author, Title, Date, Pertin	ent Pages, E	tc.)		
•	AQ			tical Design of Discrete Speech, and Signal Proces				
	AR	Gerzon, Michael, "Ultra-Directional Microphones: Applications of Blumlein Difference Technique: Part 1," Studio Sound, Volume 12, 10/1970, pp. 434-437.						
	AS			al Microphones: Applica 1970, pp. 501-504.	tions of Blur	nlein Differenc	e Technique	Part
	_1	1.	Date Considere	. 1				

AUG 0 5 2002
Technology Center 2002

Sheet 2 of 3

U.S. Department of Commerce, Patent and Trademark Office					Atty Docket No.		2600 1 No.			
018					M-11445 US 09/919,742					
INFORMATION DISCLOSURE STATEMENT BY APPLICANT						Applicant(s)				
(Use several sheets if necessary) JUL 2 9 2002 &						Moorer, James A.				
A STATE OF THE STA						Filing Date Group				
RADEMARK OFF					July 31, 2001					
				atent Documents						
*Examiner		Document		N	Class	0.1-1	Filing Date If Appropriate			
Initial	AA	Number	Date	Name	Class	Subclass	н Арргор	riate		
		-	Foreign	Patent Documents						
					· · · · ·		Trans	lation		
		Document	Date	Country	Class	Subclass	Yes	No		
	AB									
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)										
	AC Gerzon, Michael, "Ultra-Directional Microphones: Applications of Blumlein Difference Technique: Part									
		3," Studio Sound,	3," <u>Studio Sound</u> , Volume 12, 12/1970, pp. 539-543.							
	AD	Skolnik, Merrill I., Radar Handbook, 1990								
	AE	Harry F. Olson "Directional Microphones," <u>Journal of the Audio Engineering Society</u> , October 1967. [0002]								
	AF	B.R. Beavers, R. Brown "Third-Order Gradient Microphone for Speech Reception" <u>Journal of the Audio Engineering Society</u> , December 1970. [0002] NOTE: These two articles, 1) and 2), are included in "Microphones: An Anthology of Articles on Microphones from the Pages of the Journal of the Audio								
	AG	Section 9.1, pp. 128-134, of Leland B. Jackson "Digital Filters and Signal Processing," Kluwer Academic Publishers, Hingham, MA USA, 1996. [0029]								
-	AH	Sections 2.5 and 8.6 of Gene H. Golub, Charles F. Van Loan "Matrix Computations: Third Edition" <u>Johns Hopkins University Press, Baltimore MD USA</u> , 1996. [0037]								
	AI	J.H. McClellan, T.W. Parks, L.R. Rabiner "A Computer Program for Designing Optimum FIR Linear Phase Digital Filters" <u>IEEE Transactions on Audio and Electroacoustics</u> , Volume AU-21, pp. 506-526, December 1973. [0039]								
	AJ	Andrew G. Deczky "Synthesis of Recursive Digital Filters Using the Minimum p-Error Criterion" <u>IEEE</u> <u>Transactions on Audio and Electroacoustics</u> , Volume AU-20, pp. 257-263, October 1972. [0039]								
	AK	Metcalfe, R.M., and Boggs, D.R. "Ethernet: Distributed Packet Switching for Local Computer Networks", Communications of the ACM, Volume 19, Number 7, pp. 395-404, July 1976. [0072]								
	AL	Patrick M. Peterson "Adaptive Array Processing for Multiple Microphone Hearing Aids" <u>RLE Technical</u> Report No. 541, February 1989. (This is from: RLE (Research Laboratory of Electronics), MIT, Cambridge, MA 02139								
Examiner			Date Considere	d						
				ot citation is in conformar opy of this form with you						

U.S. Department of Commerce, Patent and Trademark Office					Atty Docket No.		Serial No.		
					M-11445 I	US	A. AUG 0 5		
INFORMATION DISCLOSURE STATEMENT BY APPOIDANT					Applicant(s)	PAE	CE	
(Use several sheets if necessary)					Moorer, Ja	imes A.	Alic		
			(3	JUL 2 9 2002 5	Filing Date	e	To Equip	05	
			1	EL SE	July 31, 20	001	January Januar	'Centa	
			U.S. Pa	ntent BAREMAN'S				- (e)	
*Examiner		Document	Data	Name	Class	Subclass	Filing Date If Appropriate		
Initial	AA	Number	Date	Name	Class	Subciass	п Арргор	Tiate	
	1	<u> </u>	Foreign 1	Patent Documents	<u></u>		J.,		
							Trans	lation	
		Document	Date	Country	Class	Subclass	Yes	No	
	AB								
	1	OTHER .	ART (Including Au	thor, Title, Date, Pertino	ent Pages, E	tc.)	<u> </u>		
	AC	<u></u>		ndent Beamformer With			E Conference	on	
		Acoustics, Speec	h, and Signal Proce	essing, Volume 5, pp. 29	95-2998, 19	95.			
	AD	Berhout et al., "A Vol. 5, pp. 2764-		Wave-Field Synthesis,	" Journal of	the Acoustic So	ociety of Ame	erica,	
	AE	Goodwin Michael M.; Elko, Gary W., "Constant Beamwidth Beamforming," <u>IEE Conference on Acoustics, Speech, and Signal Processing</u> , Volume 4, pp. I-169-I-172, 1993. Flanagan, J.H. et al. "Autodirective Micro Systems," <u>Acustica</u> , Volume 73, pp. 58-71, 1991.							
	AF								
	AG								
	AH			· · · · · · · · · · · · · · · · · · ·					
	AI								
	AJ								
	AK								
	AL								
Examiner	•		Date Considered	l		· · ·			
				t citation is in conformatory of this form with you					